

Setting up the server

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Windows PowerShell
PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\4-sharing_images> docker run --rm -d --name apache -p 80:80 httpd:2.4
Unable to find image 'httpd:2.4' locally
2.4: Pulling from library/httpd
69692152171a: Pull complete
7284b4e0cc7b: Pull complete
3678b2d55ccd: Pull complete
ab492cf0b2a4: Pull complete
991f7f97a9d8: Pull complete
Digest: sha256:e4c2b93c04762468a6cce6d507d94def02ef4dc285278d0d926e09827f4857db
Status: Downloaded newer image for httpd:2.4
a06fb055aca8e31159902357a18350bb37debbec715ab43a5be4f2fdb657a20

PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> curl localhost

StatusCode      : 200
StatusDescription : OK
Content         : <html><body><h1>It works!</h1></body></html>

RawContent      : HTTP/1.1 200 OK
                  Accept-Ranges: bytes
                  Content-Length: 45
                  Content-Type: text/html
                  Date: Fri, 14 May 2021 06:29:17 GMT
                  ETag: "2d-432a5e4a73a80"
                  Last-Modified: Mon, 11 Jun 2007 18:53:14 GMT
                  Server:...
Forms           : {}
Headers        : [[Accept-Ranges, bytes], [Content-Length, 45], [Content-Type, text/html], [Date, Fri, 14 May 2021 06:29:17 GMT]...]
Images         : {}
InputFields    : {}
Links          : {}
ParsedHtml     : mshtml.HTMLDocumentClass
RawContentLength : 45

PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> docker cp index.html apache:/usr/local/apache2/htdocs/
PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> curl localhost

StatusCode      : 200
StatusDescription : OK
Content         : <html><body><h1>It works in Docker!</h1></body></html>

RawContent      : HTTP/1.1 200 OK
                  Accept-Ranges: bytes
                  Content-Length: 56
                  Content-Type: text/html
                  Date: Fri, 14 May 2021 06:30:39 GMT
                  ETag: "38-5c21b46021380"
                  Last-Modified: Wed, 12 May 2021 05:27:58 GMT
                  Server:...
Forms           : {}
Headers        : [[Accept-Ranges, bytes], [Content-Length, 56], [Content-Type, text/html], [Date, Fri, 14 May 2021 06:30:39 GMT]...]
Images         : {}
InputFields    : {}
Links          : {}
ParsedHtml     : mshtml.HTMLDocumentClass
RawContentLength : 56
```

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PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> docker stop apache
apache
PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> docker run --rm -d --name apache -p 80:80 httpd:2.4
67c09b206ff814a54b438d256ca957aae2398b2d8531d6c7964025aaafe82901
PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> curl localhost

StatusCode      : 200
StatusDescription : OK
Content          : <html><body><h1>It works!</h1></body></html>

RawContent      : HTTP/1.1 200 OK
                  Accept-Ranges: bytes
                  Content-Length: 45
                  Content-Type: text/html
                  Date: Fri, 14 May 2021 06:32:06 GMT
                  ETag: "2d-432a5e4a73a80"
                  Last-Modified: Mon, 11 Jun 2007 18:53:14 GMT
                  Server:...
Forms           : {}
Headers         : {[Accept-Ranges, bytes], [Content-Length, 45], [Content-Type, text/html], [Date, Fri, 14 May 2021 06:32:06 GMT]...}
Images          : {}
InputFields     : {}
Links           : {}
ParsedHtml      : mshtml.HTMLDocumentClass
RawContentLength : 45

PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes>

```

Managing volumes

```

PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> docker volume ls
DRIVER      VOLUME NAME
PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> docker volume create myvolume
myvolume
PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> docker volume ls
DRIVER      VOLUME NAME
local       myvolume
PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> docker volume rm myvolume
myvolume
PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> docker volume ls
DRIVER      VOLUME NAME
PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes>

```

Mounting volumes on containers

```

PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> docker volume create httpd_htdocs
httpd_htdocs

PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> docker run --rm -d --name apache -p 80:80 -v httpd_htdocs:/usr/local/apache2/htdocs/ h
ttpd:2.4
51f8a98e085c58fdb8dab9fba72f9614808777e14b87ba3e7549e867925203e1
PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> docker cp index.html apache:/usr/local/apache2/htdocs/
PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> curl localhost

StatusCode      : 200
StatusDescription : OK
Content          : <html><body><h1>It works in Docker!</h1></body></html>

RawContent      : HTTP/1.1 200 OK
                  Keep-Alive: timeout=5, max=100
                  Connection: Keep-Alive
                  Accept-Ranges: bytes
                  Content-Length: 56
                  Content-Type: text/html
                  Date: Fri, 14 May 2021 06:40:53 GMT
                  ETag: "38-5c21b46021380..."
Forms           : {}
Headers         : {[Keep-Alive, timeout=5, max=100], [Connection, Keep-Alive], [Accept-Ranges, bytes], [Content-Length, 56]...}
Images          : {}
InputFields     : {}
Links           : {}
ParsedHtml      : mshtml.HTMLDocumentClass
RawContentLength : 56

PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> docker stop apache
apache

```

```

PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> docker run --rm -d --name apache -p 80:80 -v httpd_htdocs:/usr/local/apache2/htdocs/ httpd:2.4
b1bd41558452e9f03d69e6f70c68912e347608221343946ad270eef26d991b02
PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> curl localhost

StatusCode      : 200
StatusDescription : OK
Content          : <html><body><h1>It works in Docker!</h1></body></html>

RawContent       : HTTP/1.1 200 OK
                   Accept-Ranges: bytes
                   Content-Length: 56
                   Content-Type: text/html
                   Date: Fri, 14 May 2021 06:41:38 GMT
                   ETag: "38-5c21b46021380"
                   Last-Modified: Wed, 12 May 2021 05:27:58 GMT
                   Server:...
Forms            : {}
Headers          : [[Accept-Ranges, bytes], [Content-Length, 56], [Content-Type, text/html], [Date, Fri, 14 May 2021 06:41:38 GMT]...]
Images           : {}
InputFields      : {}
Links            : {}
ParsedHtml       : mshtml.HTMLDocumentClass
RawContentLength : 56

PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> docker stop apache
apache
PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> docker volume rm httpd_htdocs
httpd_htdocs
PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> docker volume ls
DRIVER      VOLUME NAME
PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes>

```

Mounting host directories on containers

```

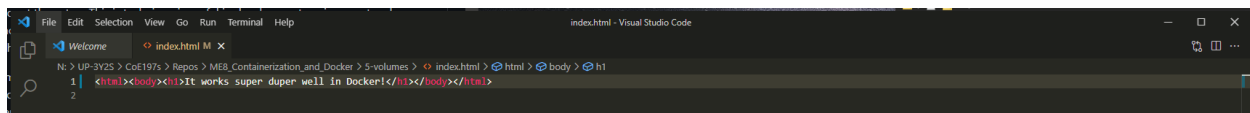
PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> pwd
Path
----

PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> docker run --rm -d --name apache -p 80:80 -v $(pwd):/usr/local/apache2/htdocs httpd:2.4
fff10853248e2ce171f46901e55fb792fb55cb11c8e124397f21ac0521864
PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> curl localhost

StatusCode      : 200
StatusDescription : OK
Content          : <html><body><h1>It works in Docker!</h1></body></html>

RawContent       : HTTP/1.1 200 OK
                   Keep-Alive: timeout=5, max=100
                   Connection: Keep-Alive
                   Accept-Ranges: bytes
                   Content-Length: 56
                   Content-Type: text/html
                   Date: Fri, 14 May 2021 06:49:58 GMT
                   ETag: "38-5c21b4607f67f..."
Forms            : {}
Headers          : [[Keep-Alive, timeout=5, max=100], [Connection, Keep-Alive], [Accept-Ranges, bytes], [Content-Length, 56]...]
Images           : {}
InputFields      : {}
Links            : {}
ParsedHtml       : mshtml.HTMLDocumentClass
RawContentLength : 56

```



```

PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> curl localhost

StatusCode      : 200
StatusDescription : OK
Content          : <html><body><h1>It works super duper well in Docker!</h1></body></html>

RawContent       : HTTP/1.1 200 OK
                   Accept-Ranges: bytes
                   Content-Length: 73
                   Content-Type: text/html
                   Date: Fri, 14 May 2021 06:51:11 GMT
                   ETag: "49-5c244aa1a1210"
                   Last-Modified: Fri, 14 May 2021 06:50:50 GMT
                   Server:...
Forms            : {}
Headers          : [[Accept-Ranges, bytes], [Content-Length, 73], [Content-Type, text/html], [Date, Fri, 14 May 2021 06:51:11 GMT]...]
Images           : {}
InputFields      : {}
Links            : {}
ParsedHtml       : mshtml.HTMLDocumentClass
RawContentLength : 73

PS N:\up-3y2s\coe197s\repos\me8_containerization_and_docker\5-volumes> docker stop apache
apache

```